

REMARKS

Upon entry of this amendment, claim 1 will be amended. Accordingly, claims 1 and 3 are pending in the application.

Applicants note that claim 1 has been amended by further clarifying the order of how the solidification time and freezing-environment temperature for a desired average pore diameter is determined.

Support for the amendment of claim 1 can be found, e.g., at paragraph [0059] of the present specification (published application).

No new matter has been added.

Response to Rejection under 35 U.S.C. § 103(a)

The Office Action maintains the rejection claims 1 and 3 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Kikuchi et al. (Key Engineering Materials, 2004, Vols. 254-256, pp. 561-564), hereinafter “Kikuchi.”

The Office Action states that the “claimed method does not show steps to utilize the obtained graphs to control the pore size of the fibrous apatite/collagen composite, thus the charting does not contribute [to the] patentability of the method.” Furthermore, the Action notes that “Applicant does not show evidence and arguments directed to advantages over Kikuchi.”

In response, Applicants note that in an attempt to advance prosecution of the present application and without expressing agreement with or acquiescence to the rejection, claim 1 has been amended by further clarifying the order of the employed method steps for determining the solidification time S_b and freezing-environment temperature T_0 that correspond to a desired

average pore diameter. Applicants note that all recited method steps in claim 1 are active steps and should be given patentable weight.

Applicants further submit herewith a Declaration under 37 C.F.R. § 1.132 of Daisuke Shoji, the first named inventor of the claimed invention, which demonstrates the advantages of the presently claimed method in comparison to the method described in Kikuchi. In the Declaration, experiments are described that have been made to obtain additional data points for the functions shown in Figures 6 and 8 of the present specification. As can be seen in the graphs of Figures 6A and 8A of the Declaration, by adding points d-2 and e-2, a more exact curve can be drawn than shown in Figures 6 and 8 of the present specification (Figures 6 and 8 of the present specification only include a-2, b-2, and c-2). The Declaration further demonstrates that by first determining a specific solidification time based on a specific freezing-environment temperature (Figure 6A), and then using said determined solidification time to determine a corresponding average pore diameter (Figure 8A), that the actually measured average pore diameter (experimental pore diameter) is very close to said calculated pore diameter. In comparison, it is shown in the Declaration that the method according to Kikuchi (see Declaration, Figure 9A) leads to not such a close match between calculated pore diameter and experimental pore diameter.

In view of the foregoing, Applicants respectfully request withdrawal of the obviousness rejection over Kikuchi.

CONCLUSION

In view of the foregoing, Applicants respectfully request withdrawal of the rejection of record and allowance of each pending claim.

If any issues yet remain which can be resolved by telephone, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below

Respectfully Submitted,
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Enclosure: Declaration of Daisuke Shoji (7 pages)

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